

REMARKS

By this amendment, claims 1, 3, 5-7, 16, 22-25, 30-33, 42 and 48-58 are pending, in which claims 2, 17 and 43 are canceled without prejudice or disclaimer (claims 4, 8-15, 18-21, 26-29, 34-41 and 44-47 having been previously canceled), claims 1, 3, 5-7, 16, 30, 31, 33 and 42 are amended, and claims 52-58 are newly presented. No new matter is introduced.

The Office Action mailed January 26, 2005 rejected claims 1-3, 5-7, 16, 17, 22-25, 30-33, 42, 43 and 48-51 as obvious under 35 U.S.C. § 103 based on *Nishimura* (US 6,493,360) in view of *Dent* (US 6,023,477) and in further view of *Wakabayashi* (US 6,643,342), and claims 16, 17, 42 and 43 as obvious under 35 U.S.C. § 103 based on *Wakabayashi* in view of *Dent*.

Applicant appreciates the indication that claims 22-25 and 48-51 are allowed.

In the interest of advance prosecution, Applicant has amended independent claims 1, 16, 30 and 42, and canceled independent claims 17 and 43. Claim 1, as amended, recites "**transmitting to a first terminal a carrier signal comprising a plurality of frames, each of said frames comprising a plurality of time slots, wherein one of the time slots includes beacon information and another one of the time slots include data output by a second terminal.**" Amended claim 16 recites "**generating beacon information as a plurality of unique phase signals; and transmitting a data signal to a terminal, said data signal comprising a plurality of frames, a portion of each frame comprising a respective one of said plurality of unique phase signals, wherein the data signal further includes data from another terminal.**" Independent claim 30 now recites "**wherein said transmitter includes beacon information in one of the time slots and data output by a second terminal in another one of the time slots.**" Amended claim 42 recites "**a transmitter adapted to generate beacon information as a plurality of unique phase signals and to transmit a data signal to a terminal, said data signal comprising a plurality of frames, a portion of each frame comprising a unique one of said plurality of unique phase signals; and wherein the data signal further includes data from another terminal.**"

By contrast, none of the applied references of *Nishimura*, *Dent*, and *Wakabayashi*, alone or in combination, discloses any use of "beacon information" in conjunction with "data" in the manner claimed.

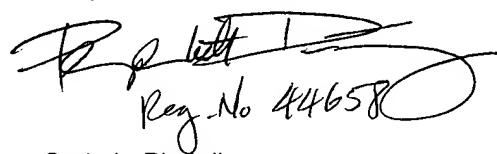
Applicant recognizes (for example, Specification paragraph [0008]) that traditional satellite systems incorporate a beacon signal on a separate carrier frequency in order to synchronize the ST with the satellite. However, providing a beacon signal on a separate carrier requires an additional modulator on the satellite and additional hardware for demodulating at the ST. This adds unwanted cost and complexity to the system. The claimed invention addresses this problem, which is not addressed by any of the applied references.

Accordingly, the obviousness rejections are unsustainable.

Turning now to newly added claims 52-58, independent claim 52 recites “generating a downlink signal including a beacon signal and data, wherein portions of the beacon signal are provided in a plurality of frames of the downlink signal.” Independent claim 54 recites “means for generating a downlink signal including a beacon signal and data, wherein portions of the beacon signal are provided in a plurality of frames of the downlink signal.” These features are not disclosed in the art of record. Thus, claims 52, 54 and 56 are allowable. Additionally, dependent claims 53 and 55 are allowable at least because of their dependency from allowable claims 52 and 54. New independent claims 56-58 are drawn to the allowable subject matter.

Therefore, the present application, as amended, overcomes the rejections of record and is in condition for allowance. Favorable consideration of this application is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (301) 601-7252 so that such issues may be resolved as expeditiously as possible. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

  
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